

FIGURE 3

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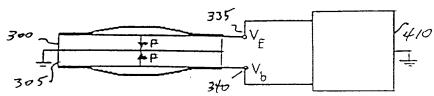
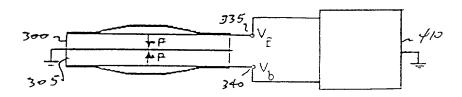


FIG. 44 Monopole (in phase same amplitude),  $V_b = V_f = V_{ff}$ ,  $\phi = 0$ 



F16. 4B Dipole (out of phase, same amplitude),  $V_b = -V_d$ ,  $V_f = V_d$ ,  $\phi = \pi$ 

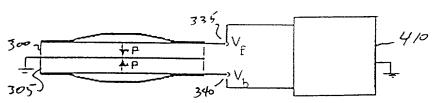
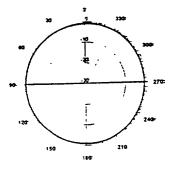


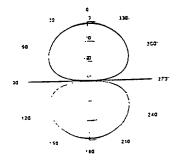
FIG.  $\psi$ C Cardioid.  $V_b/V_f = (1-R)/(1+R)$ , where  $R = TVR_m/TVR_d$ ,  $0 < \phi < \pi$ 





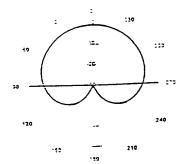
F16.5A 'Monopole mode





F16. SB dipole mode





E/6.  $5^{\circ}$  cardioid mode.  $V_b : V_f = (1-R)/(1-R)$ , where  $R = TVR_m$ ,  $TVR_d$ 

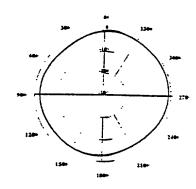


FIGURE GA

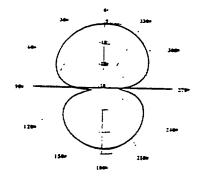
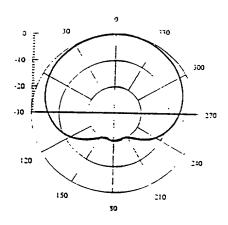


FIGURE 6B



F16.7 A

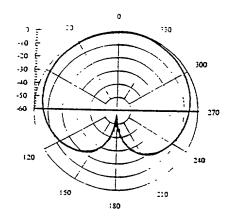
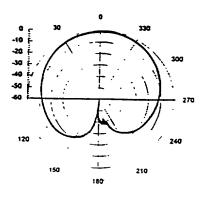


FIG. 7B



FIGURES 8A

$$V_f = 100 \text{ V}, V_b = 55 \text{ V}, \phi = 237 \text{ }^{\circ}$$

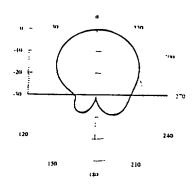


FIGURE 8B

20kHz,  $V_f = 100$  V,  $V_b = 38$  V,  $\phi = 268$  °

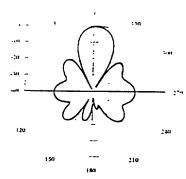
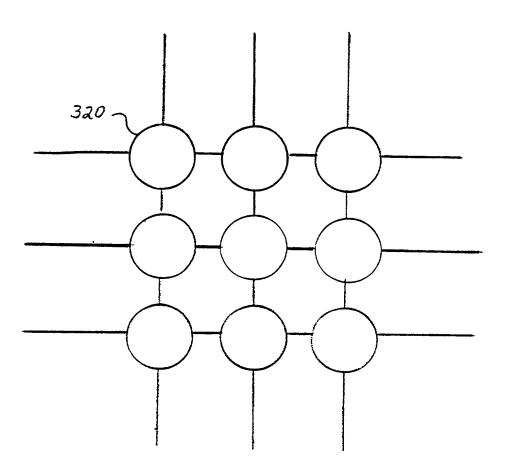


FIGURE 8C

80kHz, 
$$V_f = 98 \text{ V}$$
,  $V_b = 100 \text{ V}$ ,  $\phi = 332 ^{\circ}$ 





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